# IN THE BEGINNING.....

# Smith Mountain Project Completed in September 1963 and Reached Minimum Power Pool in May 1965



# Article 29 Sets the MIF

- Weekly Minimum Average Release of
   650 Cubic Feet Per Second
- Minimum Instantaneous Release of 60
   Cubic Feet Per Second
- Spawning Release set each Spring by the Virginia Department of Game and Inland Fisheries for landlocked Striped Bass



#### Then Problems Arose....

- Peaking resulted in loss of habitat and erosion of stream banks.
- The drought of 1980-81 and the 650 cfs
   MIF dropped the lake 5.5 feet by Feb. 81
- Appalachian Power sought a variance from Article 29's minimum release
- FERC and the SWCB approved the variance. New MIF 250 to 400 cfs.



## General Assembly Takes Action

- In 1989 the Virginia General Assembly Creates the Virginia Water Protection Permit which serves as Section 401 Certification
- The VWP Permit Law requires the SWCB to protect instream uses by setting minimum instream flow and limiting volumes of water withdrawn



#### **Five Power Plants seek Permits**

- Attracted by the FERC mandated 650 cfs minimum release, 5 power plants seek permits to withdraw water from the Staunton River below the Smith Mountain Project in the early 1990's.
- All use cooling towers with high consumptive use
- Cumulative withdrawals of about 40 mgd
- First use of The Virginia Water Protection Permit creates a battleground to establish policy precedents.



#### What Happened?

- Initial permits contained conditions designed to protect fisheries with a minimum instream flowby of 30% of mean annual flow (525 cfs)
- Environmentalists appeal; say SWCB required to protect recreational boating; need 720 cfs for boating.
- SWCB reconsiders, modifies power plant permits to protect boating 720 cfs



#### All is well until ....

- In July 1998 THE DROUGHT begins.
- By October 1998 Lake is down 3.5 feet
- Thousand's of new lakefront property owners now have a keen interest in high Lake Levels
- AEP asks for variance to maintain hydropower viability and protect public safety. (Submerged tree tops @ 787' msl)



#### But What about.....

- If we give AEP a variance the new power plants are not allowed to take water because the flow will drop below their mif requirement
- Governor, FERC and SWCB intervene. Variances for everyone.
- Implementation takes from mid October 1998 to Mid December 1998.



## Long Term Fix Needed

Article 29 amended May 19, 2000 to allow DEQ to grant 45 day variances upon request by AEP in consultation with DGIF and after appropriate public notices.

 Power Plant VWP permits modified in 2000 to include mif limits that apply when AEP gets a variance



#### Response to Drought Today

- AEP makes requests to DEQ in writing copies dozens of Stakeholders
- DEQ consults with DGIF and Stakeholder representatives via conference call
- No public notices or public comment periods required
- Request to decision generally takes four days.



#### **Typical Variance Features**

- Recreational Releases:
  - Timed to arrive during daylight in scenic river
  - Weekends during the summer
  - Holidays
  - 650 cfs
  - frequency varies according to situation
- 400 cfs in Summer
- 350 cfs in Fall and Winter



## Stakeholder Groups

- Department of Game & Fisheries
- American Electric Power
- Department of Environmental Quality
- Smith Mountain Lake Association
- Downstream Industries (2)
- Downstream Riparian Environmental Organizations

